

## MODIS sensor Working Group (MsWG) Summary

January 05, 2005

**Attendance:** Stuart Biggar, Bryan Breen, Vincent Chiang, Gene Eplee, Bob Evans, Gerhard Meister, Chris Moeller, Tony Salerno, Vince Salomonson, Junqiang Sun, Gary Toller, Eric Vermote, Zhengming Wan, Jack Xiong

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### **Scheduled Agenda**

#### **Item 1: L1B LUT delivery – Recent LUTs**

- Aqua first LUT in collection 5 – V5.0.1.0 (Dec 13) to DAAC.
- Aqua m1 and RVS (RSB) forward update – V4.3.1.13 (Dec 14) to DAAC.
- Terra m1 and RVS (RSB) forward update – V4.3.0.19 (Dec 14) to DAAC
- Terra collection 5 m1 update LUT – V5.0.0.1 (Dec 20) to DAAC.  
(Note: updated B5 m1 for time period 2001/183-212.)
- Terra m1 forward update LUT – V4.3.0.20 (Jan 4) to DAAC.

#### **Item 2: Instrument status – Terra and Aqua MODIS are normal**

- Terra SFE-A anomaly on Dec 24, day 2004359; Terra was on day-orbit heading south into the SAA region at the time of the SFE anomaly. Data missing from 13:52 to 20:38 UTC for all instruments onboard.
- Terra FOT is evaluating plans to power recycle its SRR to bring back the “bad” PWAs. MODIS currently is operating with 34 supersets for its buffer. (*See MsWG Oct 22, 2003*)  
TS) Power cycle may take place at the end of January for 1 to 2 hours data loss.

#### **Item 3: Calibration activities – SD/SDSM, BB, SRCA, and lunar observations are all normal**

- Sets of old scripts were applied for the SRCA radiometric mode calibrations (Terra day 2004327, Aqua 2004330) using the 10W bad lamp #2. Correct scripts (using lamp #4) were used afterwards on day 2004341 both Terra and Aqua. The results are as expected.  
(*Background/history: Aqua 10W bad lamp #2 was replaced by lamp #4 in March 2003; Terra bad lamp #2 was replaced by #4 in May 2004.*)

JX) Has SBRS investigated the possibility to re-activate lamp #2?

BB) I don't think so.

VS) The IOT has been reporting the Terra nadir door at anomaly position. If it's the trigger or switch problem, maybe add another note for switch/telemetry anomaly instead of instrument anomaly.

BB) OK.

### **Around the Table**

**Participant:** Chris Moeller – on the test of Terra DSM RVS

CM) I looked at B36 cross-track symmetry and striping after we applied the DSM RVS. The A-side2 result looks very good not only the improvement of the symmetry, but it also reduces the detector striping. For B-side, it does improve symmetry modestly but still see detector striping. For A-side1, one mirror side is ok, the other mirror side is worse if the DSM RVS is applied.

VS) So the B-side and A-side2 are good. Does this suggest that the RVS changes in time?

- CM) I agree. The results of the DSM RVS applied to the majority of the data are good. But I would like to look more data like late in the A-side1 going to B-side.
- JX) In the early A-side there was a mirror side correlated noise (MSCN) pattern change problem on the EV dn after the instrument reset. Later in the A-side2, the SBRS updated the software patch to have double resets that prevents the MSCN change. This could be the problem of that.
- BE) We have seen some drift of the r.m.s. on the SST and shift in the RVS.
- JX) I'll coordinate with Chris and send him the MSCN pattern information and what data should we look at.
- BE) Please send the information to us too.

**Participant:** Gary Toller – L1B code change update

- GT) For collection 5, the L1B needs to add some of the global attributes related to geo-location into the L1B code. It was uncovered during the science test. The codes (Terra and Aqua) will be delivered next week.

**Participant:** Gerhard Meister – Ocean group is ready to reprocess Aqua collection\_5 using the collection\_4 code (without waiting for the collection 5 new codes delivery).

**Participant:** Bob Evans – on the SST retrieval coefficients progress

- VS) For the science meeting, can you provide anything for the Terra Ocean Color? And ask Peter Minnett for the SST.

**Participant:** Stuart Biggar – Terra and Aqua calibrations next week.

**Participant:** Eric Vermote – on Land's processes

- VS) Can you also summarize the surface reflectance improvement?
- EV) Ok. One thing is that we have improved the aerosol, much more clean and accurate.
- VS) Are you adjusting Wisconsin's clouds mask? Or using your own clouds mask?
- EV) With our own clouds mask.
- JX) We (Eric and MCST) should get together to review the polarization approaches.
- EV) How about in late January.

**Participant:** Vince Salomonson – on the proposal of extending the Terra mission.

Next MsWG meeting scheduled on January 19, 2005